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ART XIII.—Additions to and Revision of the Catalogue of Victorian Marine Mollusca.

BY J. H. GATLIFF AND C. J. GABRIEL.

[Read 9th July, 1908].

In the following paper 85 species are dealt with; in 38 cases the name has been revised, the remaining 47 species are additions to our recorded fauna.

We have to give our grateful recognition to the skilled assistance rendered to us by Mr. E. A. Smith, of the British Museum; Mr. Chas. Hedley, Sydney; Dr. J. C. Verco and Mr. W. T. Bednall, Adelaide; and Mr. Robt. Hall and Mr. W. L. May, Tasmania.

We desire to state that we do not aim at giving every possible reference, or every synonym, but our endeavour has been to state the correct name that in each instance should be used for our shells. We only cite the author and date of a genus in cases where it has not been given previously.

Dr. W. H. Dall in 1904 published a paper entitled "An Historical and Systematic Review of the Frog-shells and Tritons" in vol. xlvii. of the Smithsonian Miscellaneous Collections. It deals with the matter in a masterly and comprehensive manner. His classification has been adopted by the British Museum, and also by the Australian Museum, Sydney ; we therefore follow the same course, and in the present paper indicate the necessary changes that have in consequence to be made in the nomenclature of our shells.

CORALLIOPHILA RUBROCOCCINEA, Melvill and Standen.

1901. Coralliophila rubrococcinea, Melvill and Standen. P.Z.S. Lond., p. 401, pl. 21, f. 2.

Hab.--Port Fairy and San Remo.

Obs.—This is the species referred to in vol. x. of these proceedings, page 261, as being closely allied to *C. fritschi*, Martens. CORALLIOPHILA ELABORATA, H. and A. Adams.

1863. Coralliophila elaborata, H. and A. Adams. P.Z.S. Lond., p. 433.

Hab.--San Remo and Lorne.

Obs.—This is the species referred to in vol. x. of these proceedings, page 262.

Family SEPTIDAE.

Genus Personella, Conrad, 1865.

PERSONELLA EBURNEUS, Reeve.

1898. Lotorium eburneum, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 265.

PERSONELLA VERRUCOSUS, Reeve.

1898. Lotorium verrucosum, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 266.

Genus Eugyrina, Dall, 1904.

EUGYRINA SUBDISTORTUM, Lamarck.

1898. Lotorium subdistortum, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 263.

Genus Argobuccinum, Mörch, 1852.

ARGOBUCCINUM ARGUS, Gmielin.

1898. Lotorium (Argobuccinum) argus, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 267.

ARGOBUCCINUM BASSI, Angas.

1898. Lotorium bassi, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 263.

Argobuccinum Australasia, Perry.

1906. Lotorium (Argobuccinum) australasia, Pritchard and Gatliff. P.R.S. Vic., vol. xviii., n.s., p. 42.

Genus Cymatium, Bolten, 1798.

CYMATIUM (GUTTURNIUM) PARKINSONIANUM, Perry.

1906. Lotorium parkinsonianum, Pritchard and Gatliff. P.R.S. Vic., vol. xviii., n.s., p. 42.

CYMATIUM (TURRITRITON) EXARATUM, Reeve.

1898. Lotorium exaratum, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 265.

CYMATIUM (CABESTANA), SPENGLERI, Chemnitz.

1898. Lotorium spengleri, Pritchard and Gatliff. P.R.S. Vic., vol. x., n.s., p. 263.

Genus Septa, Perry, 1811.

SEPTA RUBICUNDA, Perry.

1906. Lotorium rubicunda, Pritchard and Gatliff. P.R.S. Vie., vol. xviii., n.s., p. 41.

Genus Latirofusus, Cossman, 1889.

LATIROFUSUS SPICERI, T. Woods.

- 1876. Fusus spiceri, T. Woods. P.R.S. Tas., p. 137.
- 1891. Latirofusus nigrofuscus, Tate. T.R.S. S.A., vol. xiv., p. 258, pl. 11, f. 3.
- 1901. Latirofusus spiceri, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 356.

Hab.—Dredged between Phillip and French Islands, Western Port.

Obs.—Also found in South Australia and King Island (type in Hobart Museum). It is a dark brown shell with a blackish epidermis. Size: Length 20, width 7 mm.

A shell nearly related to the above is *Latirus bairstowi*, Sowerby, from Port Elizabeth, South Africa, of which we have specimens before us. CANTHARUS SUBRUBIGINOSA, E. A. Smith.

1879. Tritonidea subrubiginosa, E. A. Smith. P.Z.S. Lond., p. 206, pl. 20, f. 40.

1896. Tritonidea fusiformis, Verco. T.R.S. S.A., p. 219, pl. 6, f. 1, 1a, 1b.

Hab.-Portland (Maplestone); Ocean Beach, Point Nepean.

Obs.—One of us compared our shell with the type in the British Museum, and Mr. Smith stated it was his species. Dr. Verco has informed us that his species is conspecific.

VOLUTA MAMILLA, Gray.

- 1898. Voluta mamilla, Pritchard and Gatliff. P.R.S. Vic., vol. xv., n.s., p. 283.
- 1901. Voluta mamilla, Dautzenberg. Jour. d Conch., p. 10, pl. 2, f. 1.

Obs.—The above is a very fine figure, and it appears to be the first time that the adult form has been depicted.

MITRA STRANGEI, Angas.

- 1899. Mitra franciscana, Pritchard and Gatliff. P.R.S. Vie., vol. xi., n.s., p. 188.
- 1901. Mitra franciscana, Tate and May. P.L.S. N.S.W., p. 361, pl. 24, f. 30.

Hab. Dredged living, Western Port, about 5 faths.

Obs.—Mr. W. F. Petterd states that he handed the shell to Rev. Tenison Woods, informing him that it was M. strangei, Ang., and he must have forgotten this fact when he re-named it, and our species has been compared by one of us with M. strangei in the British Museum, and they are the same.

MITRA CINERACEA, Reeve.

Obs.—This was included as a Victorian species, as the "Challenger" Report stated that it was dredged off East Moncoeur Island, Bass Straits. One of us inspected the only specimen

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^{1867.} Mitra strangei, Ang. P.Z.S. Lond., p. 110 and p. 194.

^{1907.} Mitra cineracea, Gatliff. P.R.S. Vic., vol. xx., n.s., p. 31.

obtained by the "Challenger," which is now in the British Museum, and it was labelled habitat Philippines. Upon writing to Mr. E. A. Smith upon the matter, he replied, "I think Watson made a mistake in quoting this from East Moncoeur Island, Station 162. It should have been Station 212. See p. 717, of the 'Challenger' Report, where it is quoted under Philippines, but on p. 704, under E. Moncoeur Island, it is not mentioned."

Genus Turris, Montfort, 1810. Replacing *Turricula*, Klein, 1753 (pre Linnean).

TURRIS CINNAMOMEA, A. Adams.

- 1854. Volutomitra cinnamomea, A. Ad. P.Z.S. Lond. p. 134.
- 1901. Mitra cinnamomea, Tate and May. P.L.S. N.S.W., p. 361.

Hab.—Dredged living between Phillip and French Islands, Western Port, about 5 fath.; San Remo.

Obs.—One of us has examined this species at the British Museum, and ours is the same. It is of rare occurrence here.

MARGINELLA SIMSONI, Tate and May.

- 1884. Marginella minima, Petterd, Jour. of Conch., p. 144, non Sowerby, 1846.
- 1900. Marginella simsoni, Tate and May. T.R.S. S.A., vol. xxiv., p. 92.
- 1901. Marginella simsoni, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 364, pl. 27, f. 95.

Hab.—Dredged living in about seven fathoms, between Phillip and French Islands, Western Port; Portsea, Port Phillip.

Obs.—This is a minute species, the type being described as being, "Long. $1\frac{1}{2}$ mil., lat. $\frac{3}{4}$ mil." We have obtained them varying in dimensions from this size up to length 2.9 mm., breadth 2 mm. In general appearance it approaches nearly to *M. shorehami*, Pritchard and Gatliff; but the latter has a more produced spire and wider aperture. In the reference last named Messrs. Tate and May also cite their figure 78, pl. 26, but this represents a different species. In their former paper they place it as spec. nov., whereas it should have been stated to be nom. mut.

MARGINELLA MULTIPLICATA, Tate and May.

1900. Marginella multiplicata, Tate and May. T.R.S. S.A., vol. xxiv., p. 91.

1901. Marginella multiplicata, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 364, pl. 27, f. 88.

Hab.-Shoreham, Western Port.

Obs.—A minute white shell. Length 1.6, width .95 mm. In general appearance resembling *M. cymbalum*, Tate.

MARGINELLA VICTORIAE, Gatliff and Gabriel.

1908. Marginella victoriae, Gatliff and Gabriel. P.R.S. Vic., vol. xxi., n.s., p. 365, pl. 21, f. 5.

Hab.--Dredged, Western Port. In shell sand, Portsea, Port Phillip.

COLUMBELLA LEGRANDI, T. Woods.

- 1876. Columbella legrandi, T. Woods. P.R.S. Tas., p. 152.
- 1883. Columbella legrandi, Tryon. Man. Conch., vol. v., p. 137, pl. 51, f. 49.
- 1899. Columbella brunnea, Pritchard and Gatliff. P.R.S. Vic., vol. xi., n.s., p. 203.
- 1901. Columbella legrandi, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 367.
- 1902. Columbella legrandi, May. P.R.S. Tas., p. 110, Fig. 5 in text.

Hab.-San Remo; Ocean Beach, West Head, Flinders.

Obs.—An examination of the type proves that it and C. brunnea, Brazier, are the same species; the outer lip of the type is imperfect. In complete examples this is varicosely thickened.

COLUMBELLA (PYRENE) LURIDA, Hedley.

1907.---Pyrene lurida, Hedley. P.L.S. N.S.W., vol. xxxii., p. 510, pl. 17, f. 19. Hab.—San Remo; Portsea; Torquay.

Obs.—A small, semi-translucent, brownish shell. Size of type, length 3.4, width 1.5 mm. Our specimens are rather narrower.

We are indebted to Mr. Hedley for the identification of this species.

CANCELLARIA PURPURIFORMIS, Valenciennes.

- 1841. Cancellaria purpuriformis, Valenciennes. In Kiener's Coq. Viv., No. 27, pl. 7, f. 4.
- 1855. Cancellaria purpuriformis, Sowerby. Thes. Conch., vol. ii., p. 448, pl. 95, f. 68 and 70.
- 1856. Cancellaria purpuriformis, Reeve. Conch. Icon., vol. x., pl. 16, f. 76.
- 1887. Cancellaria purpuriformis, Lobbecke. Conch. Cab., p. 88, No. 93, pl, 22. f. 9, 10.
- 1899. Cancellaria maccoyi, Pritchard and Gatliff. P.R.S. Vic., vol. xi., n.s., p. 182, pl. 20, f. 6.
- 1901. Cancellaria purpuriformis, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 373.

Hab. Western Port. Dredged living in about five fathoms, between Phillip and French Islands.

Obs.—An examination by one of us of the shell in the British Museum, named *C. purpuriformis*, Val., leads to the above conclusion, but their specimen is of a uniform pale yellow, and does not show the colour bands. Tate and May place *C. tasmanica*, T. Woods. as a synonym, and just above, on the same page, referring to C. laevigata, state, "*C. laevigata*, Sowerby, and *C. purpuriformis*, Reeve, in the Brit. Mus., are identical (R. Tate)."

TEREBRA ALBIDA, Gray.

1899. Terebra albida, Pritchard and Gatliff. P.R.S. Vic., vol. xi., n.s., p. 207.

Hab.-Portsea, Port Phillip; Shoreham, Western Port.

Obs.—At the two localities named we have obtained specimens of this species, which exhibit small dark-brown spots on the shoulder of the whorl, numbering twelve to fourteen on the penultimate whorl. Previously we only knew of them being obtained of a uniform white. DRILLIA ANGASI, Crosse.

1863. Drillia angasi, Crosse. Jour. de Conch., p. 87, pl. 1, f. 5.

Hab.—San Remo (Mrs. A. F. Kenyon).

DAPHNELLA LEGRANDI, Beddome.

- 1900. Clathurella legrandi. Pritchard and Gatliff. P.R.S. Vic., vol. xii., p. 178.
- 1900. Clathurella legrandi, Hedley. P.L.S. N.S.W., p. 509, pl. 25, f. 1-3.
- 1907. Daphnella sculptior, Hedley (non Clathurella sculptilior, T. Woods). Rec. Aust. Mus., vol. vi., p. 298.

Hab.—Portland ; San Remo.

Obs.—The Rev. H. D. Atkinson kindly sent Mr. Gatliff two specimens of C. *sculptilior*, which were dredged by him at the same time as the shell that he gave to the Rev. T. Woods, which became the type. It is entirely distinct from D. *legrandi*. Mr. Gatliff also has a specimen of the latter species given to him by its author, and Mr. Hedley's figure above quoted is a good one.

Mr. Hedley gives *Daphnella bitorquata*, Sowerby, as a synonym, but we have not seen specimens bearing that name.

The type of C, *sculptilior* is not in the Hobart Museum, and Mr. W. L. May omits it from his list of T. Woods' types of the shells contained in that institution. After the original description the author remarks that his species comes close to *Clathurella sculptilis*, Angas, which is the next one following.

DAPHNELLA SCULPTILIS, Angas.

1871. Clathurella sculptilis, Angas. P.Z.S. Lond., p. 17, pl. 1, f. 19.

Hab.—Dredged between Phillip and French Islands, Western Port.

DAPHNELLA BASTOWI, Gatliff and Gabriel.

1908. Daphnella bastowi, Gatliff and Gabriel. P.R.S. Vic. vol. xxi., n.s., p. 365. pl. 21, f. 5.

Hab.—Dredged. Western Port.

CLATHURELLA ALBOCINCTA, Angas.

1871. Clathurella alboeineta, Angas. P.Z.S. Lond., p. 18, pl. 1, f. 22.

Hab.—Port Albert.

Obs.—The size of the type is: Length 5., breadth 2. mm. It is a robust, coarsely sculptured species.

Genus Amauropsis, Mörch, 1857.

AMAUROPSIS GLOBULUS, Angas.

1880. Amauropsis globulus, Angas. P.Z.S. Lond., p. 416, pl. 40, f. 5.

Hab.—One dead specimen dredged in about five fathoms, between Phillip and French Islands, Western Port, San Remo (Mrs. A. F. Kenyon).

Obs.—A thin, brown, turbinate shell.

Genus Vermicularia, Lamarck, 1799.

VERMICULARIA FLAVA, Verco.

1907. Vermicularia flava Verco. T.R.S. S.A., vol. xxxi., p. 214, f. 1 in text.

Hab.-Dredged, Western Port.

Obs.-Dr. Verco has kindly sent us specimens, and from them we have been enabled to identify portions of the shell, which we have dredged, comprising the free tube.

ADEORBIS ANGASI, A. Adams.

1863. Adeorbis angasi, A. Adams. P.Z.S. Lond., p. 424, pl. 37, f. 11, 12.

Hab.—Portsea, Port Phillip.

Obs.—A small white shell. Diameter of type, 6 mm.

ADEORBIS KIMBERI, Verco.

1907. Adeorbis kimberi, Verco. T.R.S. S.A., p. 308, pl. 29, f. 1, 2. -Hab.—Shorcham, Western Port.

Obs.—A small translucent shell. Greatest diameter of type, 3.7 mm. May be distinguished from our other two species by its smoothness.

Genus Sirius, Hedley, 1900.

SIRIUS BADIUS, T. Woods.

- 1876. Raulinia badius, T. Woods. P.L.S. N.S.W., vol. ii., p. 264.
- 1900. Sirius badius, Hedley. Id., vol. xxv., p. 88, pl. 3, f. 8.

Hab.-San Remo (Mrs. Kenyon).

Obs.-The size of the specimen figured is: Length, 5 mm.

EULIMELLA TURRITA, Petterd.

- 1884. Aclis turrita, Petterd. Jour. of Conch., vol. iv., p. 140.
- 1901. Eulimella turrita, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 384, pl. 25, f. 38

Hab.-Dredged off Portsea, Port Phillip.

Obs.—A small white translucent shell. Length of type 3, width 1 mm. Our single specimen is smaller.

ODOSTOMIA SIMPLEX, Angas.

1871. Odostomia simplex, Angas. P.Z.S. Lond., p. 15, pl. 1, f. 10.

Hab.—Dredged living, between Phillip and French Islands, Western Port.

CERITHIOPSIS TURBONILLOIDES. T. Woods.

- 1879. Bittium turbonilloides. T. Woods. P.R.S. Tas., p. 39.
- 1901. Cerithiopsis turbonilloides, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 385, f. 6 in text.

Hab .--- Dredged, Western Port.

Obs.—This species was incorrectly cited by Pritchard and Gatliff as being a synonym of *C. angasi*, O. Semper, the sculpture of which it strongly resembles The specimens affording the diagnosis had, as is generally the case, imperfect apices. These differ in the two species.

Genus Pyrazus, Montfort, 1810.

PYRAZUS HERCULEUS, Martyn.

- 1784. Clava herculea, Martyn. Universal Conch., p. 13.
- 1900. Potamides ebeninus, Pritchard and Gatliff. P.R.S. Vic., vol. xiii., n.s., p. 156.
- 1906. Pyrazus herculeus, Hedley. P.L.S. N.S.W., vol. xxx., p. 529.

Obs.—Martyn's work is in the Commonwealth Parliamentary Library. Mr. Hedley, in his paper above quoted, enters fully into both the generic and specific names of the species, and figures the radula. He also gives other synonyms, but as they have not been in use here we refrain from quoting them.

TRIPHORA AMPULLA, Hedley.

1903. Triphora ampulla, Hedley. P.L.S. N.S.W., p.615, pl. 33, f. 38, 39.

Hab.—Portsea, Port Phillip.

Obs.—A small maculated shell, white and brown. Size: Length 5, width 1.6 mm.

DIALA MONILE, A. Adams.

1902. Diala monile, Pritchard and Gatliff. P.R.S. Vic., vol. xiv., n.s., p. 87.

1906. Diala monile, Hedley, P.L.S. N.S.W., for 1905, p. 523, pl. 33, f. 36.

Hab.-A littoral shell, coast generally, in suitable localities.

Obs.—Mr. Hedley has given the first figure of this species, as quoted above.

Genus Laevilitorina, Pfeiffer, 1886.

LAEVILITORINA MARIAE, T. Woods.

1900. Risson mariae, Pritchard and Gatliff. P.R.S. Vic., vol. xiv., n.s., p. 108.

1906. Laevilitorina mariae, Hedley. P.L.S. N.S.W., for 1905, p. 527.

Hab. Coast generally.

Obs.—We always considered that this shell had been wrongly classed, and Mr. Hedley gives good reasons for his re-classification.

RISSOA (ONOBA) GLOMEROSA, Hedley.

1907. Onoba glomerosa, Hedley, P.L.S. N.S.W., vol. xxxii., p. 495, pl. 17, f. 23

Hab.—Port Albert (T. Worcester).

Obs. A small, solid, columnar shell, three last whorls spirally striated, circular mouth : our single specimen is much larger than the type, being Length 4, width 1.5 mm.

RISSOA FRENCHIENSIS, nom. mut.

1902. Rissoa eyelostoma, Pritchard and Gatliff. P.R.S. Vic., vol. xiv., n.s., p. 104.

Hab.—Dredged off French Island, Western Port, in about six fathoms; Port Phillip: Puebla Coast.

Obs.—We regret that we cannot follow the usual course and name this after its author, as the names R. woodsi and R. tenisoni are already in use.

RISSOINA RHYLLENSIS, Gatliff and Gabriel.

1908. Rissoina rhyllensis, Gatliff and Gabriel. P.R.S. Vic., vol. xxi., n.s., p. 367, pl. 21, f. 8.

Hab. Dredged between Phillip and French Islands, Western Port; San Remo; Ocean Beach, Point Nepean.

PHASIANELLA NEPEANENSIS, Gatliff and Gabriel.

1908. Phasianella nepeanensis, Gatliff and Gabriel. P.R.S. Vic., vol. xxi., n.s. p. 366, pl. 21, f. 9, 10.

Hab.-Flinders, Western Port; Ocean Beach, Point Nepean.

CALLIOSTOMA AUSTRALIS, Broderip.

- 1835. Trochus australis, Broderip. Zool. Jour., vol. v., p. 331, pl. 49, f. 3.
- 1902. Calliostoma nobile, Pritchard and Gatliff. P.R.S. Vic., vol. xiv., n.s., p. 135.

^{1877.} Rissoa cyclostoma, T. Woods (non Recluz, 1843). P.R.S. Tas., p. 153.

Hab.-Shoreham and West Head, Western Port.

Obs.—We know of only two worn examples having been obtained on our shores, but have a very broad, equilateral specimen, got living at King Island, Bass Straits. Our specimens are not so broad as this, but are much broader than that figured as the type from Garden Island, Western Australia.

HALIOTIS CYCLOBATES, Peron.

- Haliotis cyclobates, Pèron. Voy. Terre Aust., vol. ii., p. 80.
- 1903. Haliotis excavata, Pritchard and Gatliff. P.R.S. Vic., vol. xv., n.s., p. 180.
- 1906. Haliotis cyclobates, Hedley. P.L.S. N.S.W., vol. xxx., p. 520.

Hab.—Portsea, Port Phillip.

Obs.—See note on the following species.

HALIOTIS CONICOPORA, Peron.

- Haliotis conicopora, Pèron. Voy. Terre Aust., vol. ii., p. 80.
- 1902. Haliotis granti, Pritchard and Gatliff. P.R.S. Vic., vol. xiv., n.s., p. 183, pl. 10, three figures.
- 1906. Haliotis conicopora, Hedley. P.L.S. N.S.W., vol. xxx., p. 520.

Hab.-Shoreham, Western Port.

Obs.—In the last paper, quoted above, Mr. Hedley calls attention to the two species of *Haliotis* recorded and named by Pèron, and obtained by the latter at Kangaroo Island, South Australia. His descriptions are very brief, but the distinctive specific differences are given in such a way that there is no doubt about the shells he refers to. As mentioned in the catalogue, *H. granti* has been obtained at Cape Northumberland, South Australia. Mr. Hedley states that the description of *H. conicopora* answers to that of *H. tubifera*, Lamarck. If this is the case, the latter being subsequent, becomes a synonym. Lamarck gives the habitat of his species as the seas of New Holland, but Deshayes and Edwards, in the third edition of Anim. S. Vert. place *H. tubifera* as a synonym of *H. gigantea*, Chem. This is a Japanese shell, and we have never heard of it having been obtained in the seas of Southern Australia.

Specimens in the British Museum, examined by one of us, of H. cunninghamii, Gray,¹ lead to the conclusion that it is conspecific.

LUCAPINELLA OBLONGA, Menke.

- 1843. Fissurella oblonga, Menke. Moll. Nov. Holl., p. 33, No. 181.
- 1903. Lucapinella pritchardi, Pritchard and Gatliff. P.R.S. Vic., vol. xv., n.s., p. 184.

Hab. Port Phillip; Western Port.

Obs.—Having received specimens from West Australia, and discussed the matter with Mr. Hedley, we now adopt his view that *L. pritchardi*, Hedley, is conspecific.

PUNCTURELLA DEMISSA, Hedley.

- 1904. Puncturella demissa, Hedley. Rec. Australian Mus., vol. v., p. 93, f. 19.
- 1907. Puncturella demissa, Hedley. Id., vol. vi., p. 289, pl. 54, f. 3-5.

Hab.—Dredged between Phillip and French Islands, Western Port.

Obs.—A small shell. Size: Height 1.5, length 2.5, breadth 0.9 mm. It has a black epidermis, the shell being white.

Genus Cocculina, Dall, 1882.

COCCULINA TASMANICA, Pilsbry.

- 1895. Nacella parva, Angas, var. tasmanica, Pilsbry. "Nautilus," p. 128.
- 1900. Nacella tasmanica, Tate and May. T.R.S. S.A., vol. xxiv., p. 102.
- 1901. Nacella tasmanica, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 411, pl. 27, f. 89, 90.
- 1903. Cocculina meridionalis, Hedley. Mem. Aust. Mus., vol. iv., p. 331, f. 64, in text.

¹ King's Survey of Australia, vol. ii., p. 494.

Hab.--Shoreham, Western Port. Obs.-A small white species.

ACMAEA COSTATA, Sowerby.

- 1903. Acmaea costata, Pritchard and Gatliff. P.R.S. Vic., vol. xv., n.s., p. 194.
- 1904. Acmaea alticostata, Hedley. P.L.S. N.S.W., vol. xxix., p. 189.
- 1907. Acmaea alticostata, Verco. T.R.S. S.A., vol. xxx., p. 209.

Hab.—Coast generally.

Obs.—We cannot agree with Mr. Hedley and Dr. Verco in regarding A. alticostata as a distinct species, because Mr. G. B. Sowerby informed one of us that he considered that it was conspecific with A. costata, Sowerby, and Mr. E. A. Smith, of the British Museum (where the type of A. alticostata is), said the same thing.

ACMAEA LATISTRIGATA, Angas.

- 1903. Acmaea gealei, Pritchard and Gatliff (non Angas). P.R.S. Vic., vol. xv., n.s., p. 197.
- 1907. Acmaea marmorata, Verco. T.R.S. S.A., vol. xxx., p. 210.

Hab.-Coast generally.

Obs.—The former identification was made from a specimen named incorrectly *A. gealei*, received from South Australia. An examination of the type of the latter in the British Museum proved it to be a distinct form. It is much worn, and most probably is conspecific with *A. flammea*, Quoy and Gaimard.

Genus Helcioniscus, Dall, 1871.

HELCIONISCUS DIEMENENSIS, Philippi.

- 1848. Patella diemenensis, Philippi. Zeit., f. Malak, p. 162.
- 1903. Patella tramoserica, Pritchard and Gatliff (non Martyn). P.R.S. Vic., vol. xv., n.s., p. 191.

Hab.--Coast generally.

Obs.— Our species has been generally known as *P. tramoserica*, Martyn, but he quotes north-west and north-east coast of America as the habitat of his species, and his figure does not represent the shell, which is abundant on our shores, although it shows great variation, and we have a fine series before us. Not one of them could be identified by Martyn's excellent figure ; he gives no description. We therefore adopt the above name, which has hitherto been cited as a synonym. A copy of Martyn's work is in the Commonwealth Parliamentary Library.

HELCIONISCUS LIMBATA, Philippi.

1903. Patella limbata, Pritchard and Gatliff. P.R.S. Vic., vol. xv., n.s., p. 192.

Hab. - Wilson's Promontory; Cape Otway.

NACELLA CREBRESTRIATA, Verco.

1904. Nacella crebrestriata, Verco. T.R.S. S.A., vol. xxviii., p. 144, pl. 26, f. 20., 21.

Hab.-Portsea, Port Phillip. In shell sand.

Obs.—A small translucent species. Ours are usually suffused with a pink tint. Size of type: Length 3.8, breadth 2.1, height 1.8 mm.

LEPHDOPLEURUS CANCELLATUS, Sowerby.

1839. Chiton cancellatus, Sowerby. Conch. Ill., f. 104-5.

- 1847. Chiton cancellatus, Reeve. Conch. Icon., vol. iv., pl. 23, f. 152.
- 1892. Lepidopleurus cancellatus, Pilsbry, Man. Conch., vol. xiv., p. 3, pl. 3, f. 54-58.

Hab.—Dredged, Western Port.

Obs.—This species has a very wide distribution. Pilsbry citing, Britain, Greenland, Spain, Alaska and Korea. Mr. R. A. Bastow has critically compared our shell with *L. cancellatus*, received by him from Mr. Sowerby, which were obtained at Guernsey, and considers them conspecific. Our specimens are rather smaller.

ISCHNOCHITON SCULPTUS, Sowerby.

1840. Chiton sculptus, Sowerby. An. and Mag. Nat. Hist., vol. iv., p. 292.

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- 1841. Chiton sculptus, Sowerby. Conch. Ill., No. 44, f. 66.
- 1847. Chiton sculptus, Reeve. Conch. Icon., vol. iv., No. 177, pl. 26, f. 121.
- 1892. Ischnochiton sculptus, Pilsbry. Man. Conch., vol. xiv., p. 92, pl. 23, f. 89-90.

Hab.—Ocean beach, Phillip Island; dredged in about eight fathoms in Western Port, between Phillip and French Islands, on dead oyster valves.

Obs.—When described the habitat was unknown, and we have not met with any record of it. Our examples range from 5 to 15 mm. in length. The sculpture somewhat resembles that of *Callistochiton antiquus*, Reeve.

ISCHNOCHITON ARBUTUM, Reeve.

- 1847. Chiton arbutum, Reeve. Conch. Icon., vol. iv., pl. 24, f. 162.
- 1892. Ischnochiton arbutum, Pilsbry. Man. Conch., vol. xiv., p. 139, pl. 24, f. 16, 17.

Hab.—San Remo (R. A. Bastow).

Obs.—A small variegated species. Length 9, breadth 5.7 mm.

ACANTHOCHITES (LOBOPLAX) VARIABILIS, Adams and Angas.

- 1864. Hanleya variabilis, Adams and Angas. P.Z.S. Lond., p. 194.
- 1893. Hanleya variabilis, Pilsbry. Man. Conch., vol. xv., p. 101.
- 1894. Acanthochites (Notoplax?) variabilis, Pilsbry. Proc. Acad. Nat. Sci. Philad., p. 84.
- 1897. Acanthochites (Loboplax) variabilis, Bednall. P. Malac. Soc. Lond., vol. ii., p. 156.

Hab.-Shoreham, Western Port.

Obs.—A small pustulated species, girdle covered with small white spicules, in tufts at the valve sutures.

RETUSA AMPHIZOSTUS, Watson.

1886. Utriculus amphizostus, Watson. Chall., vol. xv., p. 652, pl. 48, f. 11.

Hab.—Portsea, Port Phillip.

Obs. Watson describes his species as being dredged in about seven fathoms, off Cape York, North Australia. Our shell is rather larger and more elongate, but we do not consider the slight difference has specific value.

BULLINELLA TENUIS, Hedley.

Hab.-In shell sand, Ocean Beach, Point Nepean.

Obs.—This species was kindly identified for us by its author. The size of type is: Length 2.45, breadth 1.05 mm.

Genus Akera, Müller, 1776.

AKERA TASMANICA, Beddome.

(See this volume, Pl. XXI., Figs. 6, 7).

- 1883. Akera tasmanica, Beddome. P.R.S. Tas., p. 169.
- 1901. Ilydatina tasmanica, Hedley. P.L.S. N.S.W., vol. xxv., p. 725, f. 22.
- 1901. Akera tasmanica, Tate and May. Id., vol. xxvi., pp. 417, 460.

Hab.-Shoreham, Western Port; Portsea, Port Phillip.

Obs.—A full description is given in the last reference quoted above, as follows: —" Shell globosely-oblong, imperforate, thin, hyaline. Colour, brown, darker-tinted posteriorly, with a narrow white band near the shoulder, and a wider one in the anterior-third. Last whorl inflated, equalling the total length of the shell, rounded at the shoulder; spire truncated, flush with the posterior margin of the last whorl, separated by a channelled suture, terminated by a hyaline bulbous nucleus. Aperture contracted above, enlarging anteriorly to the arched front; outer lip truncatedly angled posteriorly: columella arched, simple. Length 1.9, width 1.2 mm."

Some of our examples are of a uniform brown, upon others a median band is discernible of a lighter colour, otherwise they exactly tally with the description. Mr. May, from specimens sent to him, confirms our identification. Mr. Hedley's figure, quoted above, does not depict our shell, so we are now figuring it.

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^{1905.} Cylichna tenuis, Hedley. Rec. Aust. Mus., vol. vi., p. 54, f. 22.

AKERA SOLUTA, Ginelin.

- Particle State
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 - 1896. Akera soluta, Kobelt. Conch. Cab., p. 96, pl. 2, f. 20-22.

Hab.—San Remo (Mrs. A. F. Kenyon).

Obs.—This widely distributed species has been recorded as obtained on the coasts of New South Wales and South Australia.

CLAVAGELLA MULTANGULARIS, Tate.

- 1887. Aspergillum multangulare. Tate. T.R.S. S.A., vol. ix., p. 64, pl. 4, f. 4, a. b.
- 1892. Clavagella multangularis, Tate. Id., vol. xv., p. 134.

Hab.—Dredged living, about seven fathoms, between Phillip and French Islands, Western Port.

MYODORA ALBIDA, T. Woods.

- 1876. Myodora albida, T. Woods. P.R.S. Tas., p. 160.
- 1896. Myodora corrugata, Verco. T.R.S. S.A., vol. xx., p. 229, pl. 8, f. 1, 1a. 1b.
- 1901. Myodora albida, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 422.

Hab.—Dredged between Phillip and French Islands. Western Port.

Obs.—A small fragile species, in shape resembling a *Thraciopsis*.

THRACIA LINCOLNENSIS, Verco.

1907. Thracia lincolnensis, Verco. T.R.S. S.A., vol. xxxi., p. 229, pl. 28, f. 19-21.

Hab.-Frankston, Port Phillip.

Obs.—A small white shell. Size of type: Antero-posterior, 7.3; umbo-ventral, 5.1 mm.

SOLETELLINA BIRADIATA, Wood.

1903. Soletellina biradiata, Pritchard and Gatliff. P.R.S. Vic., vol. xvi., n.s., p. 114.

1907. Soletellina hedleyi, Sowerby. Proc. Mal. Soc. Lond., vol. vii., p. 302, pl. 25, f. 12.

Hab.—Port Phillip.

Obs.—Mr. Sowerby is right in stating that the above shell had long passed muster in Australian collections for *Sanguinolaria* vitrea, Desh. Pritchard and Gatliff discovered the error when dealing in their catalogue with *Soletellina biradiata*, Wood, of which species the shell described as *S. hedleyi* is the young form.

TELLINA SUBDILUTA, Tate.

1887. Tellina subdiluta, Tate. T.R.S. S.A., vol. ix., p.65. pl. 4, f. 9.

Hab. Dredged off Stony Point, Western Port; one valve.

VENERUPIS OBESA, Deshayes.

- 1853. Venerupis obesa, Deshayes. P.Z.S. Lond., p. 5.
- 1854. Venerupis obesa, Sowerby. Thes. Conch., vol. ii., p. 767, pl. 164, f. 15.
- 1874. Venerupis obesa, Reeve. Conch. Icon., vol. xix., pl. 3, f. 13.
- 1903. Venerupis sp., Pritchard and Gatliff. P.R.S. Vic., vol. xvi., n.s., p. 121.

Hab.—Portarlington and Portsea, Port Phillip.

Obs.—At the reference last quoted it was stated that our shell was comparable with V. obesa. Additional specimens have since been obtained, and upon comparison by one of us, prove to be the same as a single specimen at the British **Museum** bearing that name. The locality of it is given as Port Phillip.

Genus Cyamiomactra, Bernard, 1897.

CYAMIOMACTRA MACTROIDES, Tate and May.

- 1904. Cyannium mactroides, Pritchard and Gatliff. P.R.S. Vic., vol. xvii., n.s., p. 228.
- 1906. Cyam'omactra mactroides, Hedley. P.L.S. N.S.W.,

vol. xxx., p. 541, pl. 31, f. 9, 10.

Hab.-Portsea, Port Phillip; Western Port; Port Albert.

CYAMIOMACTRA COMMUNIS, Hedley.

1906. Cyamiomactra communis, Hedley. P.L.S. N.S.W., vol. xxx., p. 541, pl. 31, f. 11-13.

Hab.—Port Fairy.

Genus Legrandina, Tate and May, 1901.

LEGRANDINA BERNARDI, Tate and May.

1901. Legrandina bernardi, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 433 and 463, pl. 27, f. 98, 99.

Hab.—Port Albert (T. Worcester).

Obs.—Externally this shell resembles *Cyamiomactra*. We sent specimens for examination to Mr. W. L. May, to ascertain if it was the above species. In his reply he remarks: "Undoubtedly *L. bernardi*, only they are much more, or perhaps quite adult, whilst our typical lot I now consider to be very immature. The older shell causes the hinge to be much stronger and more easily seen than in the type."

Genus Neolepton, Monterosato, 1875.

NEOLEPTON SANGUINEUM, Hutton.

- 1884. Kellia sanguinea, Hutton. Trans. New Zealand Inst., vol. xvi., for 1883, p. 215.
- 1904. Neolepton sanguineum, Hutton. Index Faunae Nov. Zealandiae, p. 92.

Hab.—Torquay; Ocean Beach, Point Nepean.

Obs.---A small orbicular shell. Our identification is made from specimens kindly sent by Mr. H. Suter, New Zealand.

NEOLEPTON ANTIPODUM, Filhol.

- 1880. Kellya antipodum, Filhol. Compt. Rend. Acad. Sci., vol. xci., p. 1095.
- 1897. Neolepton antipodum, Bernard. Bull. Mus. d' Hist. Nat., vol. vii., p. 314.
- 1906. Neolepton antipodum, Hedley. Trans. New Zealand Inst., vol. xxxviii., for 1905, p. 73, pl. 1, f. 5.

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flab. Dredged off Portsea, Port Phillip; Ocean Beach, Point Nepean.

Obs.—A small concentrically ridged shell. Size: Height 1.9, length 2.1 mm.

NEOLEPTON ROSTELLATUM, Tate.

- 1904. Kellia rostellata, Pritchard and Gatliff. P.R.S. Vic., vol. xvii., n.s., p. 225.
- 1906. Neolepton rostellatum, Hedley. P.L.S. N.S.W., vol. xxx., p. 542, pl. 21, f. 3, 4.

1907. Neolepton rostellaum, Verco. T.R.S. S.A., p. 106. Hab. Ocean Beach, Point Nepean.

Genus Ephippodonta, Tate, 1889.

EPHIPPODONTA LUNATA, Tate.

1887. Scintilla (1) lunata, Tate. T.R.S. S.A., vol. ix., for 1886, p. 69, pl. 4, f. 8.

1889. Ephippodonta lunata, Tate. T.R.S. S.A., vol. x., p. 63.

Hab.-San Remo (Mrs. A. F. Kenyon).

Obs.-One valve only obtained.

CONDYLOCARDIA OVATA, Hedley.

1906. Condylocardia ovata, Hedley. P.L.S. N.S.W., for 1905, p. 539, pl. 31, f. 5, 6.

Hab.—Dredged between Phillip and French Islands, Western Port.

Obs. A small white translucent shell, with slight concentric ridges. Size: Height 1.35, length 1.55 mm.

Genus Anadara, Gray, 1847.

ANADARA TRAPEZIA, Deshayes.

1904. Barbatia trapezia, Pritchard and Gatliff. P.R.S. Vic., vol. xvii., n.s., p. 242.

1904. Arca lischkei, Hedley (non Dunker). P.L.S. N.S.W., vol. xxix., p. 203, pl. 9, f. 29-34.

Gatliff and Gabriel:

1907. Anadara trapezia, Lamy. Jour de Conch., vol. lv., p. 246.

Hab.-Dredged living, Western Port.

Obs. In his Revision of the Arcidae, Mr. Lamy, in a footnote. page 243, quotes Mr. Hedley's paper, but he does not appear to adopt the conclusions therein set forth.

Genus Lissarca, E. A. Smith, 1879.

LISSARCA RHOMBOIDALIS, Verco.

1907. Lissarca rhomboidalis, Verco. T.R.S. S.A., vol. xxxi., p. 221, pl. 27, f. 7.

Hab.—Dredged between Phillip and French Islands, Western Port.

Obs.—A small, translucent, horn-coloured shell of the shape indicated by its name. Size: Height 2, length 2.4 mm.

LISSARCA RUBRICATA, Tate.

- 1904. Limopsis rubricata. Pritchard and Gatliff. P.R.S. Vic., vol. xvii., n.s., p. 246.
- 1907. Lissarca rubricata, Verco. T.R.S. S.A., vol. xxxi., p. 221.

Hab.—Portsea, Port Phillip; Torquay; dredged, Western Port.

Obs. Those obtained living in the last named locality are usually of a uniform red colour, but were identified by Prof. Tate as being his species. In the first reference given above it was mentioned that the generic classification was unsatisfactory. That opinion has received confirmation by the alteration that has been made, with which we agree.

LISSARCA PICTA, Hedley. Var.

- 1899. Austrosarepta picta, Hedley. P.L.S. N.S.W., p. 430.
- 1907. Lissarca picta, Lamy. Jour. de Conch., vol. lv., p. 291.

Hab.-Dredged, Western Port.

Obs.—One valve only was found, and kindly identified for us by Mr. Hedley as a variety of his species. In a foot-note at the

reference last above quoted it is stated that a letter has been received from Mr. Hedley, re-classifying the shell.

GLYCIMERIS FLABELLATUS, T. Woods.

- 1904. Glycimeris flabellatus. Pritchard and Gatliff. P.R.S. Vić. vol. xvii., n.s., p. 242.
 - -----. Pectunculus pectinoides, Chenu (non Deshayes). Illus. Conch., vol. iii., pl. 2. f. 2.
- 1907. Glycimeris pectinoides, Verco (non Deshayes). T.R.S. S.A., vol. xxxi., p. 226, pl. 28, f. 4.

Hab.-Portland ; Lakes Entrance.

Obs.—At the reference above quoted Dr. Verco considers our species as being the same as *Pectunculus pectinoides*, Deshayes. Cuvier Regn. Anim. (Fortin and Masson's illustrated edition), Mollusques, pl. 87, f. 8. There is no copy of this work in South Australia, but our Museum Library possesses one—it does not bear the date of publication—to which we have referred. Judging from it, we are unable to agree with our species being the same as *P. pectinoides*, Deshayes. The shell there figured has radiating ribs all curving to the posterior side. In our shell they radiate almost equally from the centre of the umbones 'to either side. Chenu's figure does not quite represent the shell as we find it, but Dr. Verco states that it cannot be distinguished from a half-grown example as found by him in South Australia. When consulting Chenu's work we were unable to find any date to it.

Genus Modiolarca, Gray, 1847.

MODIOLARCA TASMANICA, Beddome.

- 1883. Modiolarca tasmanica, Beddome. P.R.S. Tas., for 1882, p. 168.
- 1901. Modiolarea tasmanica, Tate and May. P.L.S. N.S.W., vol. xxvi., p. 439, fig. 12 in text, and p. 462.

Hab.—Found, living, on seaweed, Portsea, Port Phillip; Portland.

Obs.—A small brown shell. Size of type: Length 3, breadth 4, height 2.5 mm.

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